a trapped charge; and

a level of protective material fabricated over the array of non-volatile memory cells for blocking the light received by the CMOS [imager] <u>image sensor</u> so that the trapped charged is not erased from exposure to the light.

- 4. (Amended) The image sensor of claim 1 wherein the level of protective material is fabricated as part of the CMOS [imager] image sensor.
- 5. (Amended) The image sensor of claim 1 wherein the level of protective material is a layer of metal fabricated as an interconnect for electrically connecting the CMOS [imager] image sensor and other circuits on the substrate.
- 6. (Amended) The image sensor of claim 1 wherein the CMOS [imager] image sensor comprises an active pixel array.
- 7. (Amended) The image sensor of claim 1 wherein the CMOS [imager] image sensor comprises a passive pixel array.
- 8. (Amended) An image sensor [on an integrated circuit] comprising:
 - a single integrated circuit;
- a CMOS imager in the single integrated circuit and for defining an image in response to received light;
- a non-volatile memory unit <u>in the single integrated circuit and</u> for storing the image, wherein the non-volatile memory unit is fabricated adjacent to the CMOS imager; and
- a level of protective material fabricated over the non-volatile memory <u>unit</u> for blocking the light received by the CMOS imager.
- 11. (Amended) The image sensor of claim 10 wherein the non-volatile memory <u>unit</u> stores program code information for controlling the microcontroller.

لديث

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- 15. (Amended) An image sensor [on an integrated circuit] comprising:
 - a single integrated circuit;
- a CMOS imager <u>in the single integrated circuit and</u> for defining an image in response to received light;
 - a microcontroller in the single integrated circuit and for controlling the CMOS imager;
- a non-volatile memory unit <u>in the single integrated circuit and</u> fabricated adjacent to the CMOS imager for storing program code or data; and
- a level of protective material fabricated over the non-volatile memory <u>unit</u> for blocking the light received by the CMOS imager.
- 16. (Amended) The image sensor of claim 15 wherein the non-volatile memory <u>unit</u> receives and stores the image.
- 19. (Amended) A digital camera [fabricated on a single integrated circuit] comprising:

 a single integrated circuit;
- a CMOS image sensor <u>in the single integrated circuit and</u> for defining an analog image signal photoelectrically converted in response to received light;

an analog to digital convertor in the single integrated circuit and for receiving and converting the analog image signal into a digital image signal;

- a frame memory in the single integrated circuit and for recording the digital image signal;
- a data compression/decompression unit <u>in the single integrated circuit and</u> for compressing the digital image signal provided by the frame memory;
- a non-volatile memory unit <u>in the single integrated circuit and</u> for receiving the compressed digital image signal, wherein a layer of protective material is fabricated over the non-volatile memory unit for blocking the light received by the CMOS [imager] <u>image sensor</u>; and
- a microcontroller in the single integrated circuit and for controlling the exchange of the digital image signal between the frame memory and the non-volatile memory unit.